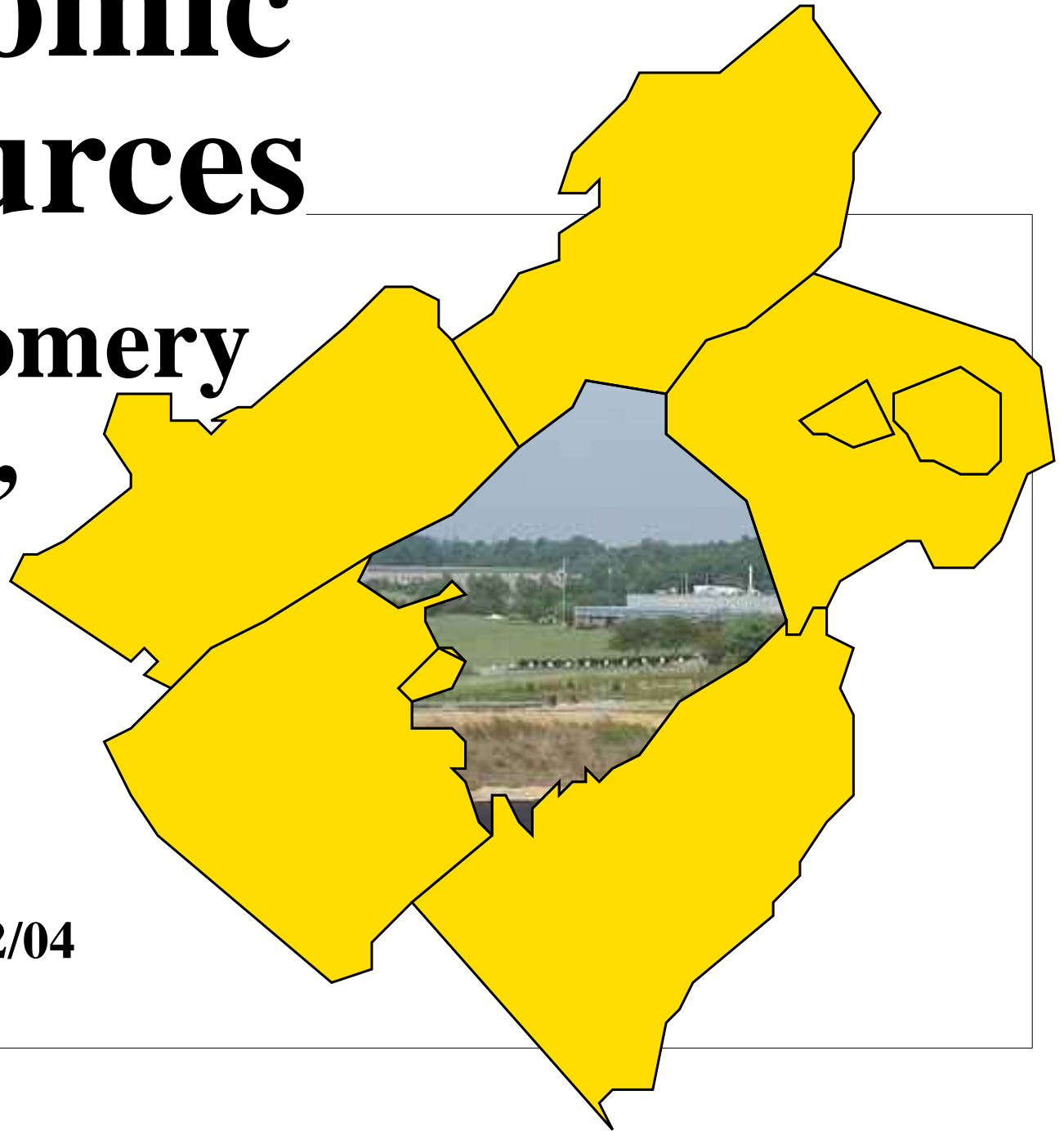


Economic Resources

**Montgomery
County,
2025**

Adopted: 10/12/04



Economic Resources: Executive Summary



Photos by Robert Parker

The economic resources chapter focuses on four primary goals:

- 1) Land use and quality of life, including establishing a quality-of-life indicators and benchmarking program;
- 2) Workforce development, including vocational and technical training and retraining;
- 3) Location of economic resources and the quality of development; and
- 4) Developing, attracting, and retaining economic resources.



Economic Resources: Introduction

Ask county residents to define “economic development,” and the number of definitions are likely to be as numerous as the responses. However, the definitions touch on common themes: the abundance and quality of jobs; the quality of development, including environmental impacts and location; wages; and the impact of economic development on quality of life.

As with other issues, economic development strongly interlocks with many of the other issues facing Montgomery County in the future, including affordable housing, environmental quality, education, transportation, and utilities. The quality of jobs and the wage scale impact the ability of individuals and families to afford housing; the quality of education and strength of workers’ skill sets directly influences the quality and range of industries likely to either relocate to or start up in the county; and the availability of sites and the presence of infrastructure dictate the location and amount of business growth in Montgomery County.

COMMUNITY SURVEY RESULTS:

Participants were asked to rank a series of five economic development related issues: 1) industrial growth, 2) commercial growth, 3) tourism, 4) agriculture, and 5) high tech growth. The mean scores for each issue indicated less support for commercial and industrial development than for agricultural, high tech, and tourism development. The future statements, on the other hand, indicated a much higher level of support for both industrial and commercial growth.

Industrial growth had a mean score of 3.07. Participants indicated that they wanted to see industrial development, but they wanted to see it sited in either existing industrial parks or in areas which were already industrialized. In addition, they wanted the industrial development

to be environmentally friendly while providing quality jobs and higher wages. With a couple of notable exceptions, most wanted to see industrial areas kept out of the more rural portions of the county and away from existing residential areas. In short, they wanted the industrial areas defined and, at least to some degree, limited. While a several respondents noted that industrial development could mean improved wages and an increased tax base, more respondents expressed concern over potential environmental impacts and the need

for a clear separation of land uses. Finally, a number of participants saw industrial growth as a means of keeping local youth from moving away by providing quality job opportunities.

The mean score for commercial growth (3.06) was similar to that of industrial growth.

While few respondents noted specific commercial enterprises they would like to see developed in the County or suggested the expansion of existing commercial areas, more respondents wanted to either limit commercial development or redirect commercial



development into downtown areas or existing commercial structures (redevelopment and revitalization). There is, however, a distinct exception to the view that commercial growth should be contained: a number of participants, in discussing compact developments, suggested an emphasis on mixed use in planned neighborhoods.

High-tech (3.59), agricultural (3.29), and tourism (3.25) growth received higher scores than either industrial or commercial development, although none of the three garnered as many comments as either industrial or commercial development. A number of participants felt that Montgomery County and the New River Valley

should be made more "tech friendly." In order to encourage high tech growth, respondents made a number of suggestions, including: 1) improving high tech infrastructure; 2) providing incentives to high tech firms willing to locate in the area; 3) working with Virginia Tech to encourage the expansion of high tech industries; and 4) encouraging the growth of local industries. One factor that accounts for the favorable comments for high tech growth is the belief that high tech industries are cleaner and more environmentally friendly than more traditional industrial developments. As with industrial development, some respondents saw high tech growth as a way of bringing in both quality jobs

and higher wages.

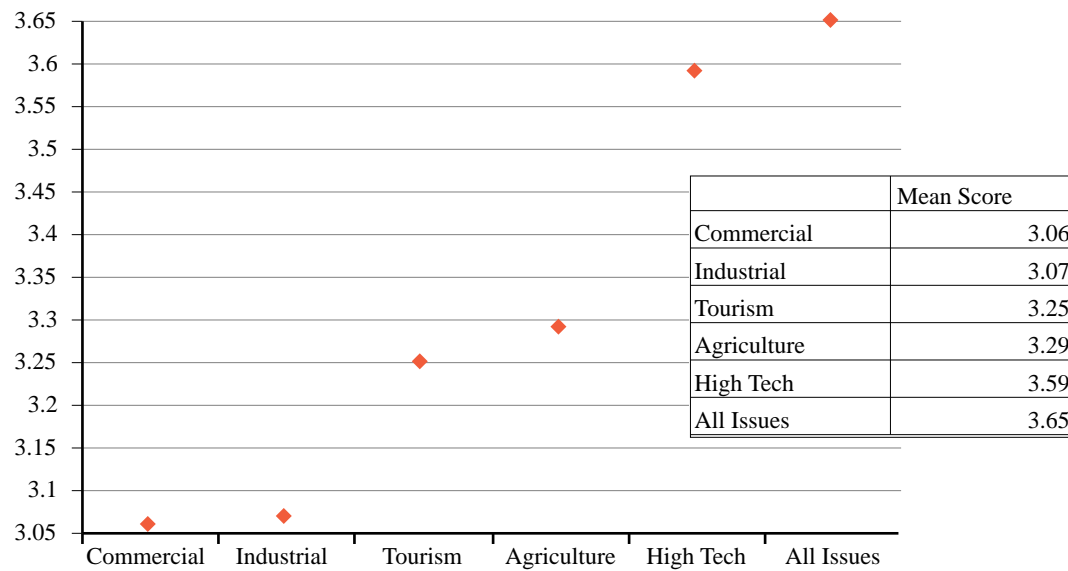
Participants written comments indicate broad-based support for both the continuation of agriculture as a going concern in Montgomery County and the expansion of specific forms of tourism, most notably those focusing on the environment, agriculture, or history.

As reflected in the economic development goals, the community survey respondents and the economic development work group volunteers agreed on the need for developing a holistic approach to economic development that focused on individual, group, and community asset formation as a means of increasing both the quality of economic development and the quality of life in Montgomery County.

Comments from the two open-ended questions fell into seven distinct categories: 1) general comments concerning the need for or the lack of need for increased economic development; 2) appropriate locations for economic development; 3) job and wage quality, including the need for a "living wage;" 4) specific types of economic development, including agricultural, commercial, high-tech, industrial, and eco-, agri-, and historical tourism; 5) revitalization and redevelopment, including historic preservation; 6) the need for design standards for industrial and commercial areas; and 7) environmental concerns primarily related to industrial development.

Participants discussed social issues related to economic development (including the current and future level of wages and quality of jobs); environmental concerns (the need for clean development); the need for increased worker training and retraining; and the creation and implementation of design standards for commercial and industrial sites. Indeed, the overwhelming majority of comments, regardless of subcategory, either directly cited or implied the need for quality development--that is, development that has a low impact on both the natural and man-made environments; pays, at least, a living wage; and provides increased opportunities to current and future Montgomery

Economic Development Issues: Mean Scores, 2003



Note: Forty-one issues were included in the "rate this issue in terms of importance" portion of the community survey. A mean score was calculated for each of the 41 issues, as well as for the total of all issues. Issues with scores higher than 3.65 (the mean for all issues) indicate that the majority of respondents rated the issue greater importance; a score lower than 3.65 indicates that the majority of respondents rated the issue of less importance than the on average. The scale for the survey was: 0=no response; 1= not important; 2=minimally important; 3=moderately important; 4=important; and 5=very important. Source: 2003 Community Survey, Montgomery County, Virginia.

County residents. As one participant noted:

The county needs a plan to attract good jobs to C'burg & B'burg. These jobs would include management, technical, computer, etc. The county needs to be able to provide good jobs for its college grads. We have plenty of minimum wage low end jobs. How about attracting businesses w/tax incentives to land regional, or corporate headquarters here?

Along with improving the quality of jobs and wages, some participants also suggested expanding adult and teen education opportunities, especially in tech related fields. One participant suggested "Educate single parents with affordable education to improve income;" while another participant suggested "more vocational opportunities for high schoolers who do not have a focus on academia."

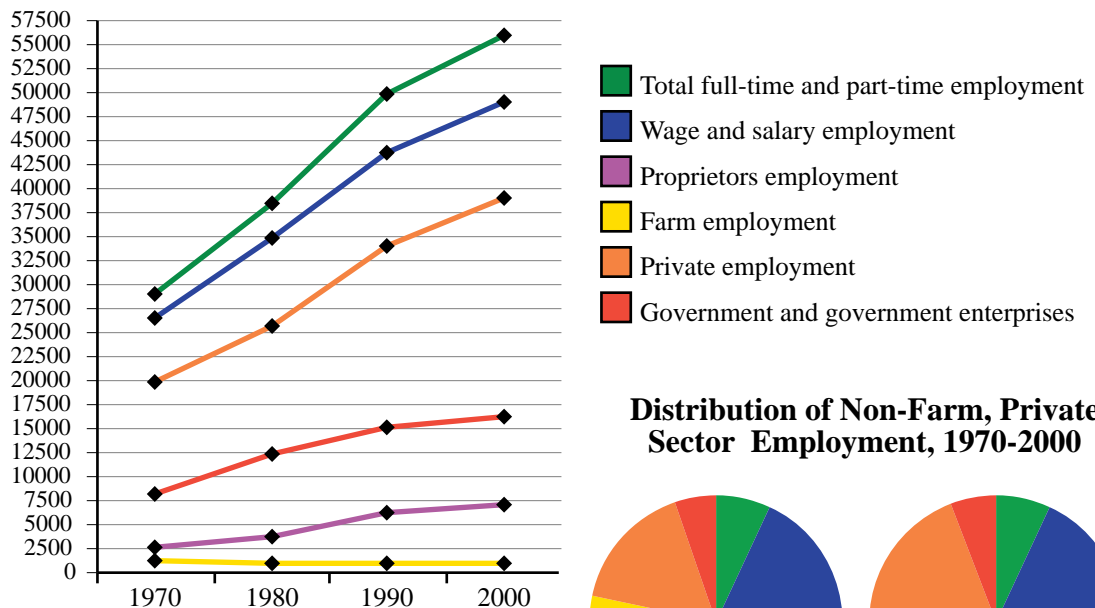
CURRENT AND HISTORIC CONDITIONS AND TRENDS

Anyone who spends time examining economic development trends since 1970 is likely to be struck by the changes in where and how we work, the kind of job market we are facing, the kinds of skills we bring to the job, and what we receive in return. Indeed, the economic landscape around the county, as with the rest of Virginia, has undergone radical changes in the past 30 years, most notably in the loss of manufacturing as the primary employment category in the private sector and the impact that loss has had on the overall earnings of workers who live and/or work, in Montgomery County.

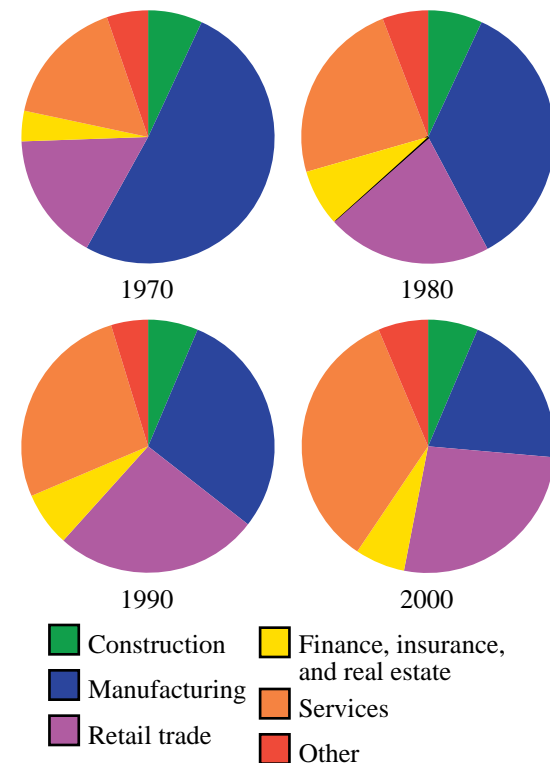
Public & Private Sector Employment

The percentage of public and private sector jobs in Montgomery County has not changed in thirty years. In 1970, the public sector

Montgomery County: Employment, 1970-2000

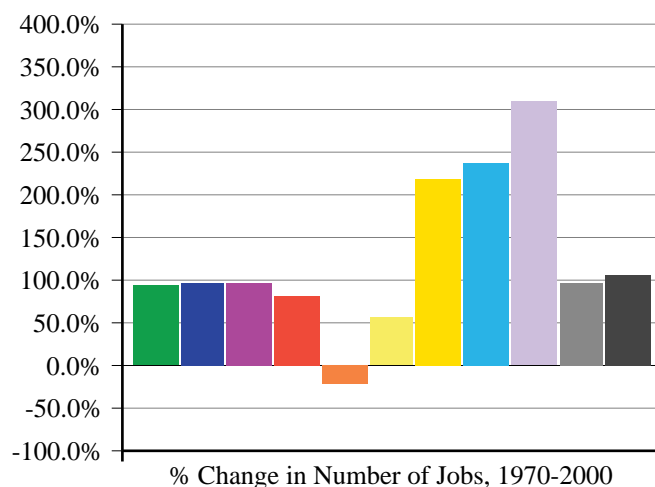


Distribution of Non-Farm, Private Sector Employment, 1970-2000



	1970	1980
Total full-time/part-time emp.	28821	38403
Wage and salary emp.	26327	34742
Proprietors employment	2494	3661
Farm employment	974	827
Private Sector	19690	25466
Public Sector	8157	12110
	1990	2000
Total full-time/part-time emp.	49643	55769
Wage and salary emp.	43519	48927
Proprietors employment	6124	6842
Farm employment	728	728
Private Sector	33788	38995
Public Sector	15127	16046

Montgomery County & Radford: % Change in the Number of Non-Farm Jobs, by Sector and Industry,



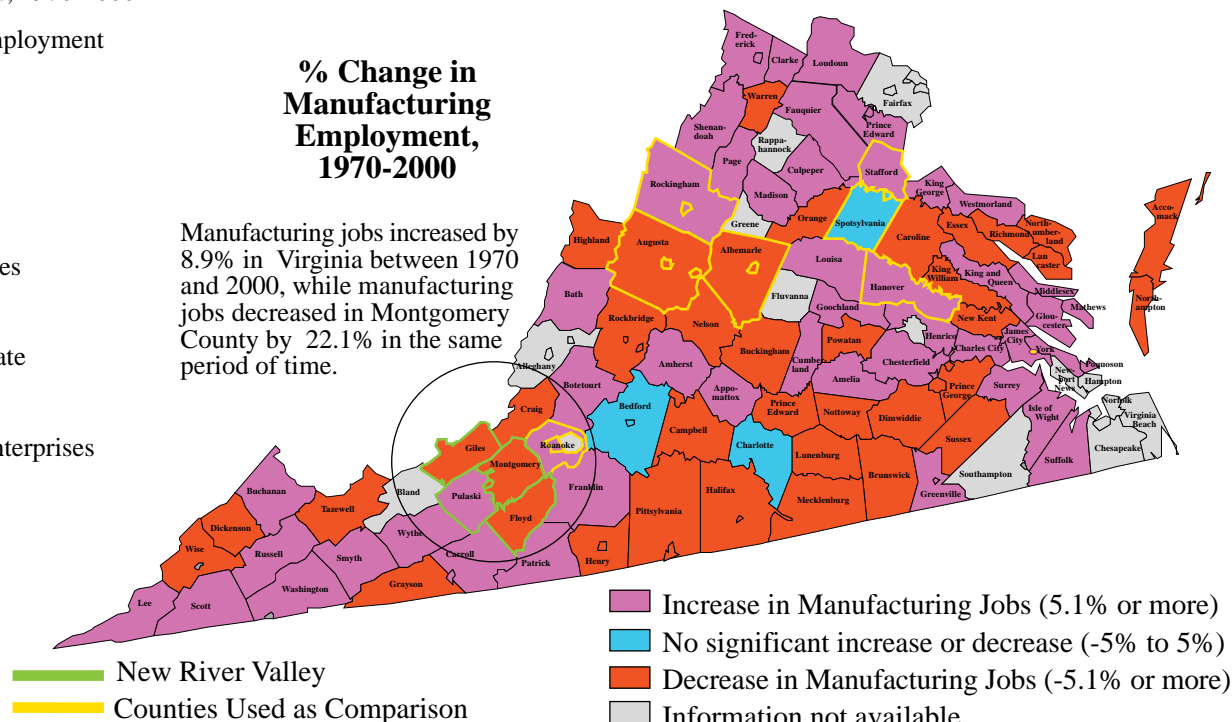
- Total full-time and part-time employment
- Nonfarm employment
- Private employment
- Construction
- Manufacturing
- Transportation and public utilities
- Retail trade
- Finance, insurance, and real estate
- Services
- Government and government enterprises
- State and local

Source: U.S. Bureau of Economic Analysis, 2004. The BEA combines Montgomery County and Radford city data. According to the Virginia Economic Development Partnership, the manufacturing sector, in the 3rd Quarter of 2002, employed 5,594, representing 14.9% of the overall workforce (including public and private sector employers).

	1970	1980	1990	2000
Total full-time and part-time employment	28821	38403	49643	55769
Nonfarm employment	27847	37576	48915	55041
Private employment	19690	25466	33788	38995
Construction	1354	1778	2201	2464
Manufacturing	10052	8970	9782	7826
Transportation and public utilities	630	766	636	990
Retail trade	3257	5404	8868	10423
Finance, insurance, and real estate	743	1830	2318	2505
Services	3225	5987	9022	13244
Government and government enterprises	8157	12110	15127	16046
State and local	7368	11428	14113	15113

% Change in Manufacturing Employment, 1970-2000

Manufacturing jobs increased by 8.9% in Virginia between 1970 and 2000, while manufacturing jobs decreased in Montgomery County by 22.1% in the same period of time.



accounted for 30% of the jobs in the county. In 2000, the public sector still accounted for 30%, leaving 70% of the jobs provided by the private sector.

Industries and Occupations.

In 1970, slightly more than half of the private sector jobs (51.1%) in Montgomery County were in manufacturing. Although the number of manufacturing firms has increased in the past 30 years, the number of manufacturing jobs has steadily decreased.

In 1970, manufacturing centered on three primary industries: high tech (Poly-scientific, Electro Tec, and Corning), textile (Imperial Reading), and defense.

Of the private sector firms, the Radford Army Ammunition Plant (Hercules) was by far the largest employer, although the employment levels, since the construction of the plant in the 1940s, have fluctuated rather dramatically based on the level of US military action at any given time. In 1970, the Radford Arsenal, which produced much of the rocket propellant used in the Vietnam War (as well as Korea and World War II), was in full swing and provided manufacturing jobs to workers who lived as far away as southern West Virginia and North Carolina.

In 1996, control of the Radford Arsenal shifted from Hercules to Alliant Techsystems, and there has since been an increased emphasis in privatizing the facilities and encouraging the growth of non-defense related uses (Grucci Pyrotechnics). According to the Roanoke Times, in the eight years prior to Alliant Techsystems takeover of the RAAP, the arsenal lost 8,600 jobs. In the aftermath of September 11th, 2001, the military presence and defense related production at RAAP have increased. However, as the numbers from the Virginia Economic Development Partnership indicate, the level of civilian/private sector employment is well below previous levels and the 8,600 jobs that disappeared in the late 1980s and early 1990s

have not been replaced.

While defense-related work still plays a significant manufacturing role in Montgomery County, the textile industry has disappeared, replaced by a growing emphasis on technology and truck/automotive related industries. With the exception of Imperial Reading, whose building has since been renovated to accommodate the needs of the County government, the major manufacturing employers in Montgomery County in 1970 remain some of the major employers in 2000, joined by a number of new, large-scale manufacturing firms, including Rowe Furniture, Hubbell Lighting, Federal Mogul, Eagle Picher Industries (Wolverine Gasket), and C&S Door Corporation.

The majority of the new manufacturing firms are located in the four industrial parks (Blacksburg, Christiansburg, Elliston-Lafayette, and Falling Branch), all of which were created since 1980. In addition, there are an increased number of small firms, including over 100 technology, environmental technology, and biotechnology firms located in the Virginia

Tech Corporate Research Center. The creation and expansion of these small, locally-created firms are likely to lead to the future expansion of manufacturing in Montgomery County.

Service and Retail Sector Employment.

While manufacturing jobs have decreased, jobs in the service and retail sectors have substantially increased. In 1970, the service sector accounted for 11.6% of overall non-farm employment and 16.4% of private employment in Montgomery County and the City of Radford. Retail jobs accounted for a similar percentage: 11.7% of overall non-farm employment and 16.5% of private sector employment. In 2000, service industry jobs accounted for 34% of private sector jobs (24.1% of non-farm employment) and retail climbed to 26.7% of private sector employment (18.9% of non-farm employment).

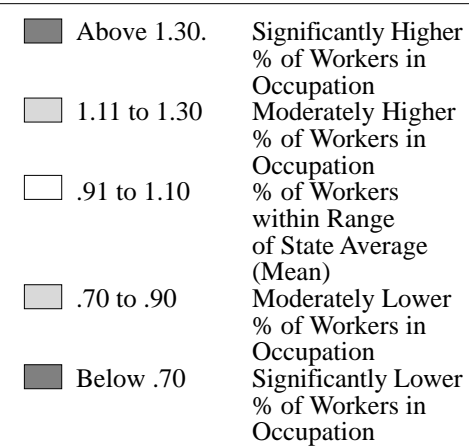
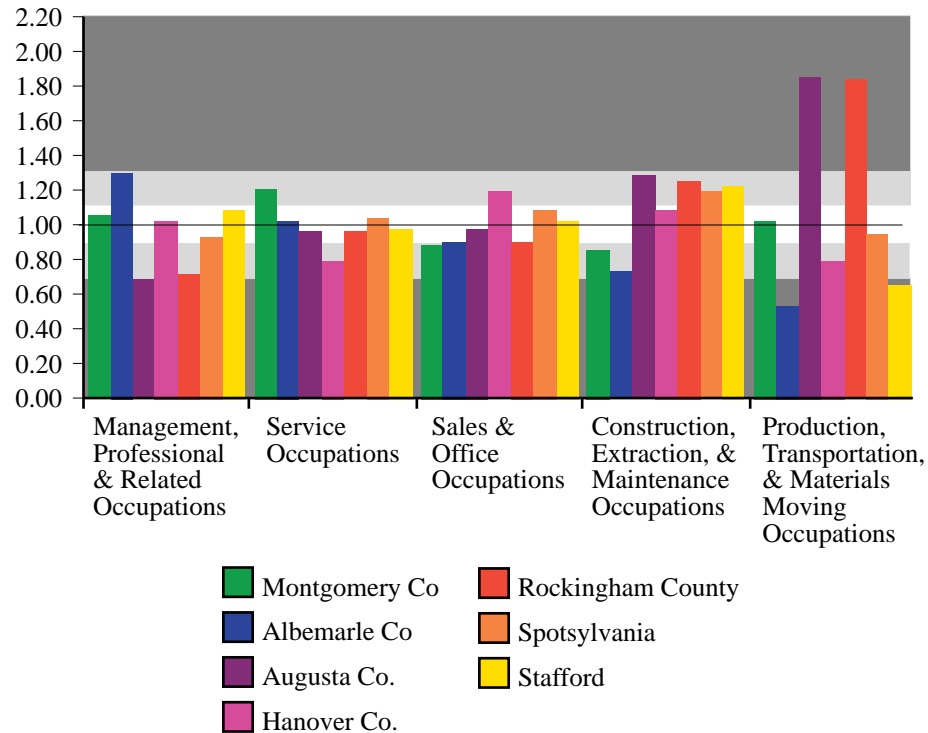
Although the increase in retail and service jobs signals a greater diversification of the local economy, the jobs, especially those in retail and in personal, food, entertainment, and lodging

Montgomery County: Major Manufacturing Employers, 2002

Employer	Type of Industry	Number of Employees
Alliant Techsystems, Inc.	Explosives	1,000 to 1,499
Litton Poly-Scientific	Fiber Optics/Security Products	600-999
Rowe Industries, Inc.	Furniture	600-999
Eagle Picher Industries	Automotive Gaskets	300-599
Federal Mogul Corporation	Engine Bearings	300-599
Hubbell Industries	Lighting Fixtures	300-599
C&S Door Corporation	Doors and Blinds	100-299
Corning, Inc	Ceramic Fibers	100-299
Electro Tec Corporation	Motors & Generators	100-299

Virginia Economic Development Partnership, 2002

**Distribution of Occupations in Montgomery County:
Comparison To Other Jurisdictions,
Based on Ratio to State Average, 2000. (State Mean=1.00)**



	Montgomery	Albemarle	Augusta	Hanover	Rockingham	Spotsylvania	Stafford
Management, Professional or Related	1.05	1.29	0.67	1.01	0.71	0.92	1.08
Service Occupations	1.20	1.02	0.95	0.79	0.95	1.03	0.97
Sales and Office Occupations	0.87	0.89	0.97	1.19	0.90	1.07	1.01
Farming, Fishing, and Forestry	0.76	1.00	2.51	0.40	3.48	0.33	0.25
Construction, Extraction, and Maintenance	0.85	0.73	1.28	1.07	1.25	1.18	1.22
Production, Transportation, and Material Moving	1.01	0.53	1.85	0.79	1.83	0.94	0.64
Total	39369	60527	32962	45165	46797	55417	45588

Source: U.S. Census Bureau, 2000

services,, pay substantially less than those in manufacturing, are more likely to be part time, and do not always offer the same benefits (including health insurance).

Although the growth of the retail and service sectors in Montgomery County may be viewed with some concern, it is important to note that the rise in these two sectors also indicates a diminished dependence, in the same period of time, on the Roanoke Valley. This is especially true in professional services and in large-scale retail. The reliance on Roanoke and the Roanoke Valley meant that funds earned in Montgomery County were exported to neighboring jurisdictions rather than being spent locally and adding to the local tax base. The development of the local service and retail industries meant that not only did we stop exporting local monies, but we started importing monies from other jurisdictions.

Service Sector:

According to the Bureau of Economic Analysis, statistics for 2000 and before are based on the Standard Industrial Classification (SIC) system. Numbers for 2001 and later are based on the North American Industry Classification System (NAISC). Although there are some similarities between the two systems, there are enough significant differences to make data comparison between the two problematic. The SIC system, which was the basis for the data included in this report, defined the service industry as:

“...establishments primarily engaged in providing a wide variety of services for individuals, business and government establishments, and other organizations. Hotels and other lodging places; establishments providing personal, business, repair, and amusement services; health, legal, engineering, and other professional services; educational institutions; membership organizations,

and other miscellaneous services, are included.”

The increase in the service and retail sectors is clearly connected to the creation and subsequent expansion of the mall area in northern Christiansburg, but the expansion of the service sector goes beyond the jobs created in the hotel, restaurant and fastfood, and the entertainment industries. The construction of the new Carilion Hospital and expansion of medical services added additional service sector jobs in the County, as did the shift of mental health services jobs from St. Albans, in Pulaski County, to the new Carilion facility. Call centers, like Echostar’s technical support center in the Falling Branch Industrial Park, added additional jobs to the economic landscape in the county. Professional services, including law and engineering, expanded as the population expanded and as the need for those services increased. Finally, consulting based firms at the Virginia Tech Corporate Research Center, including Waste Policy Institute, added a large number of high paying jobs in the County’s service sector.

Retail Sector:

Expansion of retail service in the past 30 years can be tied, almost directly, to the expansion and promotion of the mall area of Christiansburg as the “New River Valley’s Downtown.” The creation and expansion of the mall area can also be tied to the diminished presence of medium scale retailers in both Blacksburg and downtown Christiansburg. In 1970, both Blacksburg and Christiansburg had chain retail outlets in their downtown areas: Roses in downtown Blacksburg, Leggetts in downtown Christiansburg. By 2000, the chain retail stores were concentrated in the area surrounding the intersection of Rt. 114 (Peppers Ferry Road) and US 460.

The creation of the mall area also created a shift in purchase patterns in the region. In 1970, if you lived in Giles, Pulaski, or Montgomery

Counties for example, you drove to Roanoke if you wanted to visit large scale retailers (Sears, Penneys, etc.). After the development of the New River Valley Mall, and the subsequent expansion across both 460 and Rt 114, residents in Montgomery County and the surrounding area need not spend a day going down to Roanoke.

The development and expansion of the mall had four distinct effects: 1) the expansion of revenue from sales taxes; 2) increased concentration of traffic at the Rt. 114/US 460 intersection; 3) increased number of relatively low-paying retail based jobs; and 4) the loss of smaller retail outlets and the loss or shift of jobs in outlying areas (including retailers like Catos in Pearisburg) due to the closer proximity of larger retail outlets marketing lower cost goods.

It should be noted that although Montgomery County has seen a tremendous increase in the number of service and retail sector jobs, and a corresponding decrease in manufacturing jobs, the distribution of occupations in the county is within range of the state average. The number of people in service related occupations was moderately higher than state average (1.20:1.00), whereas the number in construction, extraction, and maintenance occupations was moderately lower (.85:1.00).

Location of Business and Industrial Areas.

The majority of business and industrial areas are located either in or in close proximity to Blacksburg and Christiansburg, or in the 177 Corridor between the city of Radford and Carilion Hospital adjacent to I-81. The notable exceptions are the Elliston/Lafayette Park, located next to US 460/ Rt 11, at Elliston, and Rowe Furniture, across the South Fork at Lafayette.

Montgomery County and the two towns provide industrial, corporate, and research sites in five parks. In addition, small business districts are located in the villages (Riner, Elliston, Shawsville, and Prices Fork) and along specific

Business & Industrial Locations in Montgomery County

Corporate, Research, and Industrial Parks in Montgomery County

Park	Location
Blacksburg Industrial Park	Blacksburg
Christiansburg Industrial Park	Christiansburg
Elliston-Lafayette Industrial Park	Elliston Branch
Corporate Park	Christiansburg
Midway Office Park	Christiansburg
VTU Corporate Research Center	Blacksburg

Insert County Map with Location of Business and Industrial zoning and Industrial Parks

corridors (Rt. 11 at Plum Creek, Rt 114 at Belview, and Rt 460/Rt. 11 at Lafayette)

Wages and Income

Wages vary in Montgomery County. While the universities, the Corporate Research Center, manufacturing companies and corporations, and various small high-tech concerns provide many higher skill, higher wage jobs, many of the jobs, especially those in the personal and hospitality services and commercial/retail industries, provide substantially lower wages.

Wages in Montgomery County and surrounding environs have increased since 1970, although they have not kept pace with Virginia as a whole. According to the US Bureau of Economic Analysis, the wage per job average, in 1970, was \$5,770 in Montgomery County and the City of Radford, \$5,117 in the New River Valley, and \$6,233 in Virginia. Between 1970 and 2000, wages climbed locally (343.8% in Montgomery County and the City of Radford), regionally (382% in the New River Valley), and statewide (456.9% in Virginia). By 2000, the wage per job average was \$25,606 in Montgomery County and the City of Radford, \$24,633 in the New River Valley, and \$34,656 in Virginia. In the thirty year span, the gap between the wage per job average at the local and regional level and the state level has grown. In 1970, the ratio of the local average to the state average was .92 for Montgomery County and the City of Radford and .82 for the New River Valley; by 2000, the ratio of the local average to the state average was .73 for Montgomery County and the City of Radford and .71 for the New River Valley.

The same trends hold true for per capita income and median household income, both of which evidence the growing gap between the local and state levels. Median family income, unlike per capita and median household, has narrowed the gap between the local and state medians, although it is still showing a moderate disparity.

Median Household, Median Family, & Per Capita Income, 1980-2000

Median Household Income and Ratio to State Average, 1980-2000

	1980	Ratio	1990	Ratio	2000	Ratio
Virginia	\$17,475.00		\$33,328.00		\$46,677.00	
Montgomery Co.	\$13,082.00	0.75	\$22,949.00	0.69	\$32,330.00	0.69
Floyd Co.	\$12,230.00	0.70	\$22,968.00	0.69	\$31,585.00	0.68
Giles Co.	\$13,589.00	0.78	\$24,125.00	0.72	\$34,927.00	0.75
Pulaski Co.	\$14,482.00	0.83	\$23,319.00	0.70	\$33,873.00	0.73
Radford, City of	\$14,434.00	0.83	\$19,487.00	0.58	\$24,654.00	0.53

Median Family Income and Ratio to State Average, 1980-2000

	1980	Ratio	1990	Ratio	2000	Ratio
Virginia	\$20,018.00		\$38,213.00		\$54,169.00	
Montgomery Co.	\$17,084.00	0.85	\$32,128.00	0.84	\$47,239.00	0.87
Floyd Co.	\$14,585.00	0.73	\$27,439.00	0.72	\$38,128.00	0.70
Giles Co.	\$15,274.00	0.76	\$29,416.00	0.77	\$42,089.00	0.78
Pulaski Co.	\$16,247.00	0.81	\$28,057.00	0.73	\$42,251.00	0.78
Radford City	\$18,680.00	0.93	\$31,318.00	0.82	\$46,332.00	0.86

Per Capita Income and Ratio to State Average, 1980-2000

	1980	Ratio	1990	Ratio	2000	Ratio
Virginia	\$10,176.00		\$20,527.00		\$31,210.00	
Montgomery+Radford	\$7,125.00	0.70	\$13,434.00	0.65	\$19,573.00	0.63
Floyd Co.	\$7,285.00	0.72	\$13,125.00	0.64	\$18,185.00	0.58
Giles Co.	\$7,702.00	0.76	\$14,656.00	0.71	\$20,262.00	0.65
Pulaski Co.	\$7,104.00	0.70	\$13,628.00	0.66	\$21,627.00	0.69

Sources and Notes: Median Household and Median Family Income: U.S. Census Bureau. Per Capita Income: US Bureau of Economic Analysis. The ratio of local median and per capita income to the state equivalent provides an indication of how closely aligned the local economy is to the state average:

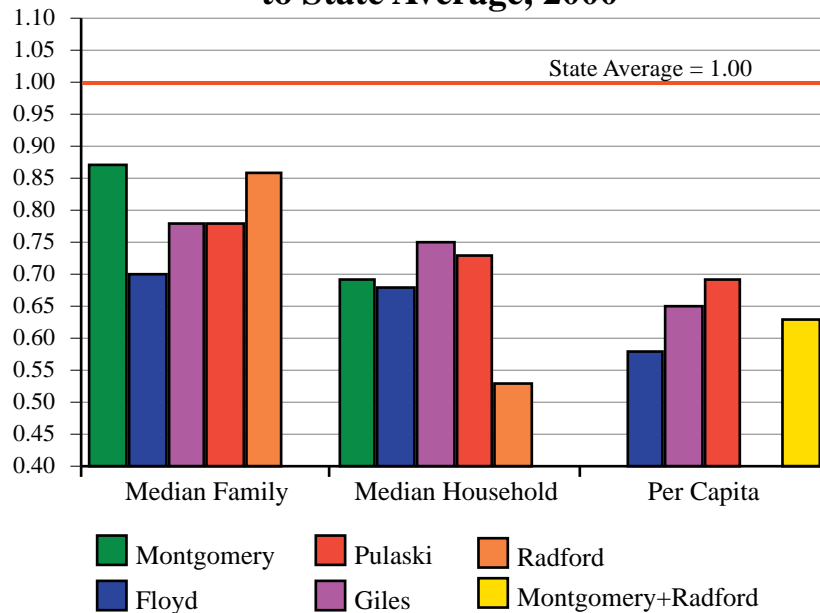
Ratio Range

=Above 1.30
=1.11 to 1.30
=1.0
=.91 to 1.10
=.70 to 9.0
=Below .70

Ratio Description

Income is significantly higher than state median or per capita
Income is moderately higher than state median or per capita
State Median or Average
Income is within standard range of state median or per capita
Income is moderately lower than state median or per capita
Income is significantly lower than state median or per capita

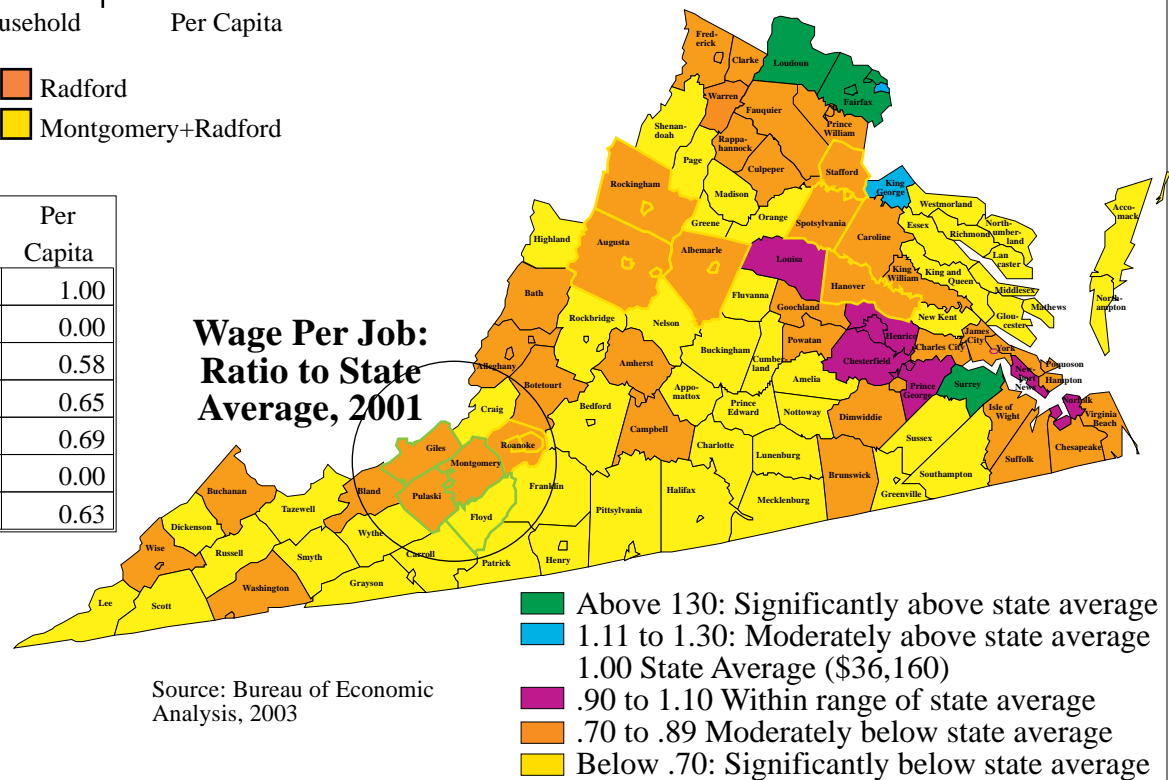
Median Family and Household and Per Capita Incomes: Ratio to State Average, 2000



	Median Family	Median Household	Per Capita
Virginia	1.00	1.00	1.00
Montgomery	0.87	0.69	0.00
Floyd	0.70	0.68	0.58
Giles	0.78	0.75	0.65
Pulaski	0.78	0.73	0.69
Radford	0.86	0.53	0.00
Montgomery+Radford	0.00	0.00	0.63

Jurisdiction	Wage Per Job	Ratio
Virginia	\$36,160	
Albemarle + Charlottesville	\$32,020	0.89
Roanoke (Independent City)	\$30,667	0.85
Roanoke + Salem	\$30,599	0.85
Stafford	\$29,745	0.82
Hanover	\$29,656	0.82
Giles	\$28,213	0.78
Spotsylvania + Fredericksburg	\$27,724	0.77
Augusta, Staunton + Waynesboro	\$27,620	0.76
Pulaski	\$27,665	0.77
Montgomery + Radford	\$26,889	0.74
Rockingham + Harrisonburg	\$26,869	0.74
Floyd	\$22,172	0.61

Wage Per Job: Ratio to State Average, 2001



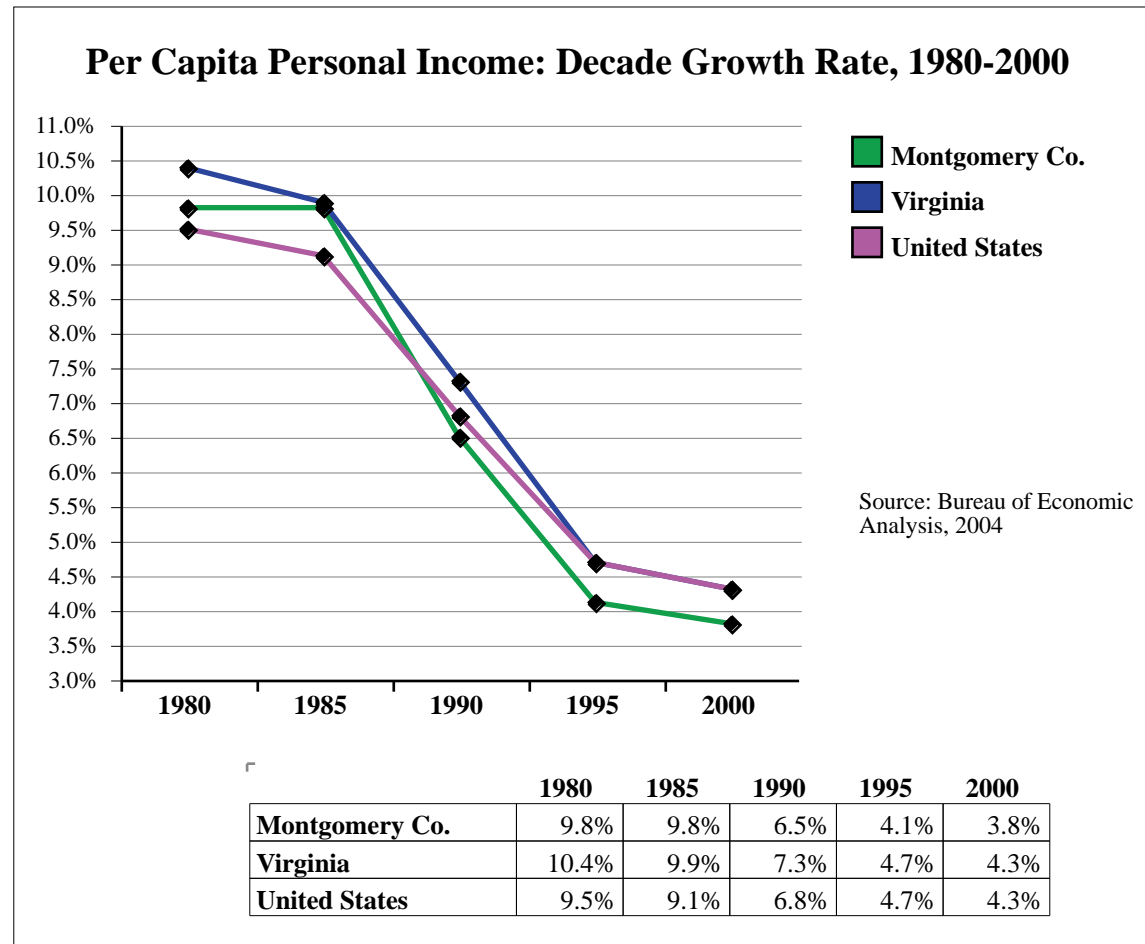
A comparison of the decade growth rate for per capita personal income indicates that while rates have fallen at the national, state, and local levels since 1985, the level in Montgomery County fell faster and farther than either the state or national rates (although all three rates are parallel and reflect, perhaps, the same trends). In the same period of time (1980-2000) the economy in Montgomery County made a significant shift away from manufacturing and towards service and retail sector jobs, which have traditionally offered lower pay and fewer benefits.

Income and the Problem of a High Concentration of Students.

One problem inherent in discussing income trends in Montgomery County is the presence of a large student population, which skews the per capita and household income numbers. Unfortunately, the presence of a large student population and their lower than average incomes masks problems of income level and distribution in the county and all too often creates a convenient method of explaining away lower income scales. One way of determining income is to look at ratio of per capita, median household, and median family income for those



Photo by Robert Parker



census block groups with a median age of 26 and older to the overall income levels for the county as a whole. The age is based on the assumption that the majority of undergraduate and masters level students are 18 to 25 years old. While there may well be some Ph.D. students 26 and older, they are statistically more likely to have spouses in the workforce and children in the public schools. Block groups with an average age of less than 26 indicate that at least half of the residents are at or near college age.

The data indicates that there is a fairly wide

disparity in income, based on location. Higher income families tend to live in or near Blacksburg or in southern Christiansburg. The highest concentration of upper income block groups are located in heavily suburbanized areas, most notably Ellett Valley and Brush Mountain (Brush Mountain Estates, Preston Forest, and Laurel Ridge). Lower income residents are located in the same areas (Plum Creek, Belview, Merrimac, etc) with high concentrations of manufactured housing. The majority of the block groups, (76.5%) have families in which two or more members of the family work. Only 9 out

Non-Student Block Groups	Median Age	MHI	Ratio	MFI	Ratio	PCI	Ratio	% 2-Income Families
202-2 (Hethwood)	27.8	\$29,559	0.91	\$31,250	0.66	\$17,323	1.01	49.5%
202-3 (Oak Manor)	26.7	\$34,750	1.07	\$59,464	1.26	\$20,533	1.20	60.0%
202-4 (Merrimac)	40.7	\$20,667	0.64	\$42,750	0.90	\$18,286	1.07	49.1%
203-1 (Brush Mtn)	36	\$30,069	0.93	\$39,167	0.83	\$23,073	1.35	51.2%
203-2 (Toms Creek)	37.3	\$49,091	1.52	\$52,708	1.12	\$26,314	1.54	57.3%
203-5 (McBryde Village)	36.5	\$61,080	1.89	\$77,839	1.65	\$36,019	2.11	57.5%
204-1 (North Main Sub.)	38.5	\$56,591	1.75	\$78,656	1.67	\$23,087	1.35	52.5%
205-2 (North Blacksburg)	26.1	\$26,696	0.83	\$60,368	1.28	\$29,568	1.73	57.4%
205-4 (Indian Run)	38.9	\$52,083	1.61	\$56,607	1.20	\$23,365	1.37	75.1%
206-1 (B'burg/Lusters Gate)	34.6	\$45,750	1.42	\$86,615	1.83	\$29,481	1.73	60.5%
206-2 (B'burg/ South Main)	36.5	\$34,896	1.08	\$52,807	1.12	\$23,876	1.40	44.3%
207-3 (B'burg/Airport Acres)	41	\$37,545	1.16	\$80,714	1.71	\$25,989	1.52	55.0%
207-4 (B'burg/ South Main)	26.3	\$18,207	0.56	\$30,000	0.64	\$12,369	0.72	57.2%
207-5 (Ellett Valley)	26	\$22,679	0.70	\$31,953	0.68	\$16,512	0.97	48.5%
208-1 (Christiansburg)	32.9	\$38,438	1.19	\$40,938	1.71	\$17,351	1.02	69.0%
208-2 (Christiansburg)	34.8	\$25,439	0.79	\$40,250	0.64	\$13,995	0.82	48.8%
208-3 (Christiansburg)	34.3	\$40,500	1.25	\$42,826	0.68	\$18,978	1.11	61.0%
208-4 (Christiansburg)	32	\$27,986	0.87	\$35,847	0.87	\$14,157	0.83	47.3%
209-1 (Christiansburg)	36	\$37,125	1.15	\$43,125	0.85	\$17,111	1.00	55.7%
209-2 (Christiansburg)	35.4	\$48,906	1.51	\$50,417	0.91	\$23,306	1.36	65.2%
209-3 (Christiansburg)	36	\$34,276	1.06	\$40,667	0.76	\$19,081	1.12	59.4%
210-1 (Christiansburg)	45.1	\$39,427	1.22	\$49,837	0.91	\$22,013	1.29	48.4%
210-2 (Christiansburg)	36.8	\$54,643	1.69	\$60,863	1.07	\$21,387	1.25	71.0%
210-3 (Christiansburg)	36.4	\$39,688	1.23	\$41,897	0.86	\$20,242	1.19	66.0%
211-1 (Christiansburg)	32.4	\$34,766	1.08	\$43,371	0.92	\$19,193	1.12	59.2%
211-2 (C'burg/Merrimac)	34.3	\$35,861	1.11	\$58,750	1.24	\$22,171	1.30	79.5%
212-1 (Belview/114)	36.7	\$23,782	0.74	\$30,417	0.64	\$14,113	0.83	37.8%
212-2 (Prices Fork)	34.3	\$35,861	1.11	\$42,361	0.90	\$16,515	0.97	51.7%
212-3 (McCoy)	33.7	\$35,333	1.09	\$43,333	0.92	\$18,405	1.08	63.0%
212-4 (Brush Mtn)	37.5	\$35,556	1.10	\$40,938	0.87	\$22,007	1.29	53.6%
213-1 (Mt.Tabor/Catawba)	40.3	\$54,185	1.68	\$60,357	1.28	\$26,293	1.54	59.2%
213-2 (Ironto/North Fork)	38.8	\$39,485	1.22	\$41,184	0.87	\$19,155	1.12	70.4%
214-1 (Elliston/Lafayette)	35.9	\$36,971	1.14	\$41,422	0.88	\$17,074	1.00	52.6%
214-2 (Elliston, South)	33.5	\$29,250	0.90	\$31,797	0.67	\$14,435	0.85	38.7%
214-3 (Shawsville)	39.2	\$36,947	1.14	\$43,333	0.92	\$23,521	1.38	58.9%
214-4 (Alleghany Springs)	43.4	\$37,440	1.16	\$45,509	0.96	\$16,919	0.99	62.6%
215-1 (Rogers/Pilot/Sugar G)	38.2	\$36,715	1.14	\$39,452	0.84	\$19,964	1.17	60.7%
215-2 (Riner)	37.2	\$35,000	1.08	\$48,155	1.02	\$18,992	1.11	63.4%
215-3 (Childress/Little River)	38.4	\$50,104	1.55	\$35,347	0.75	\$23,133	1.35	71.3%
215-4 (Plum Creek/Bethel)	34.5	\$54,199	1.68	\$37,560	0.80	\$15,077	0.88	56.6%

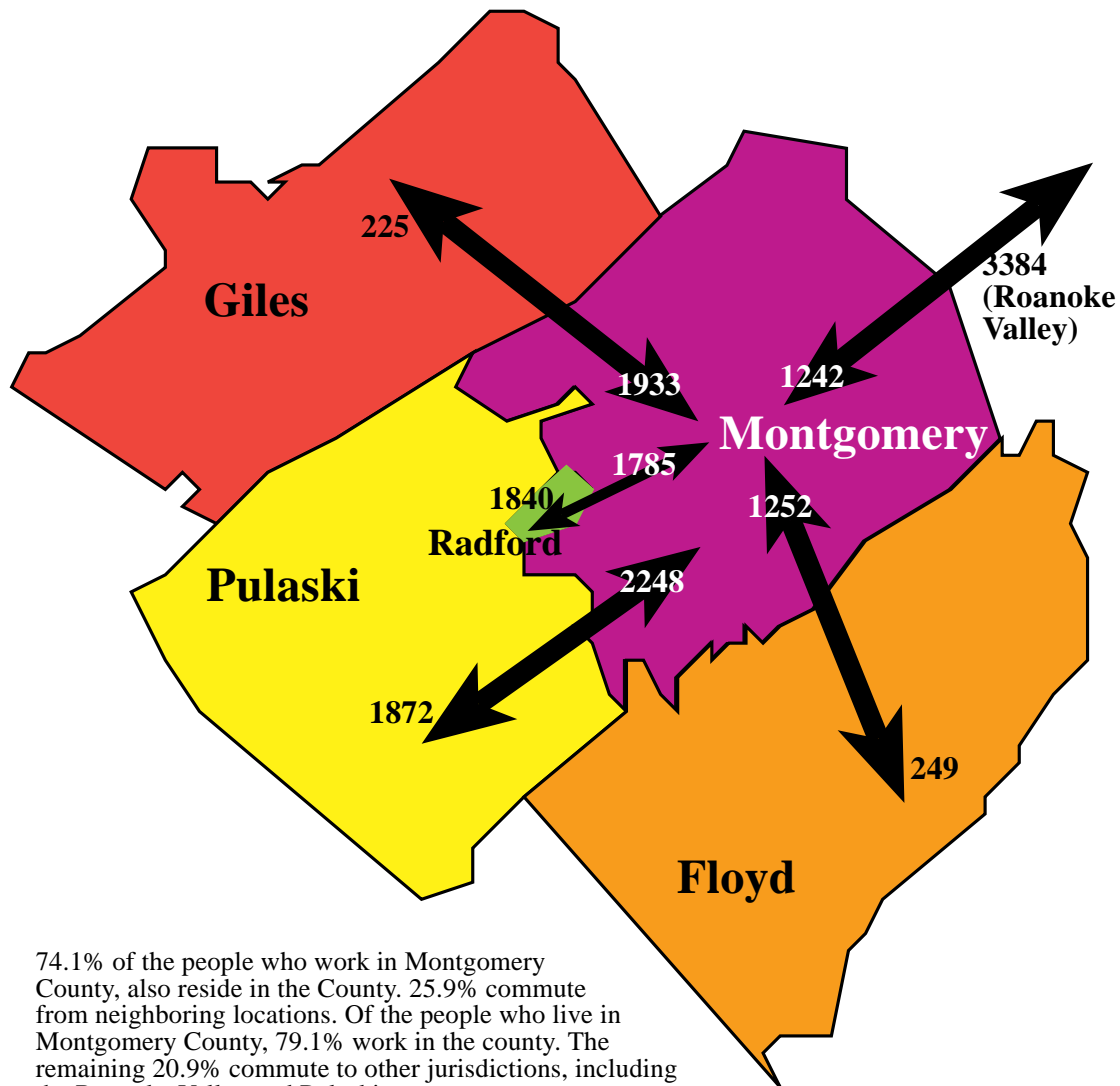
Montgomery County: Ratio of Median Household Income (MHI), Median Family Income (MFI), and Per Capita Income (PCI), by Census Block Group, to Montgomery County Income Levels., 2000

The 2000 Census listed median household income as \$32,330, median family income as \$47,239, and per capita income as \$17,077.

The percentage of families with two or more workers applies to the median family income only and does not include non-traditional households.

Source: U.S. Census Bureau, 2000 Census

Commuting Patterns: Montgomery County, 2003



74.1% of the people who work in Montgomery County, also reside in the County. 25.9% commute from neighboring locations. Of the people who live in Montgomery County, 79.1% work in the county. The remaining 20.9% commute to other jurisdictions, including the Roanoke Valley and Pulaski.

Source: New River Valley Planning District Commission, 2003

of 40 block groups have a majority of one income families.

Commuting Patterns.

Commuting patterns, including both incommuting and outcommuting, in 2000 show that while Montgomery County does export workers to neighboring jurisdictions, far more workers commute to Montgomery County for their jobs. According to the Virginia Employment Commission, Montgomery County has 29,589 workers who both live and work in Montgomery County and an additional 10,319 workers who commute to Montgomery County from other jurisdictions. Pulaski County contributes the largest number of people to the Montgomery County workforce (2,248); it also employs the largest number of Montgomery residents who work outside of Montgomery County (3,384). Unlike Pulaski County, which contributes more workers to the Montgomery County work force than draws from the same workforce, the city of Radford contributes the second largest number (1,785) workers, but draws a greater number of workers from Montgomery County (1,840) than it contributes. Montgomery County has, however, a reasonably balanced rate of in and outmigration with both Pulaski County and the City of Radford. The same is not true for the other neighboring jurisdictions. Some, like Giles and Floyd, contribute far more workers to the Montgomery County workforce (1,933 and 1,252, respectively) than they draw from the Montgomery County resident population (249 work in Floyd County and 225 work in Giles County). Finally, although Montgomery County outcommuters to the Roanoke Valley account for a very small percentage of the Roanoke Valley workforce, they account for nearly 39% of Montgomery County residents who commute to other jurisdictions for work.

Economic Resources: Goals

ECD 1.0 Economic Development, Land Use, & Quality of Life.

Actively promote economic development in the region, which takes a sustainable approach to the environmental, social, cultural, and economic integrity of the county and which contributes to the quality of life.

ECD 1.1 Montgomery County Regional Indicators Program

Design and implement a regional indicators program, incorporating physical, social, cultural, and economic benchmarks, in order to provide local jurisdictions (Montgomery County, Blacksburg, Christiansburg, and the City of Radford) with a method of defining success, tracking progress, and flagging problems to be addressed. (1)

ECD 1.1.1 Quality of Life Committee. Appoint a Quality of Life Commission, to oversee the formation, implementation, and maintenance of the Montgomery County Regional Indicators Program. Membership should represent all of the stakeholders and be drawn from current county commissions and boards (Planning Commission, Economic Development Commission, Human Relations Council, etc.), citizen organizations, and the educational and business communities. (2)

Cross References and Notes:

1. The Planning Commission initially explored the use of indicators in 2002, in conjunction with a project by graduate students in the Virginia Tech Urban Affairs and Planning Environmental Planning Studio course. A preliminary list of indicators have been included in the introductions of each chapter and an index of indicators is included in the appendix. Additional references to the indicators program are included in the “implementation” portion of the Introduction (pg. 12 of full plan).
2. Quality of life is, in many respects, subjective, although there are key indicators which are generally used to gauge a locale’s overall quality of life, including economic opportunity and income, housing affordability, educational quality and resources, and community amenities. While the majority of this plan, in one form or another, addresses quality of life issues, albeit indirectly, the issue is directly addressed in the Health and Human Resources chapter: HHS 2.0 Quality of Life (pg. 175).

ECD 1.2 Mixed Use Development. (3) Encourage the use of mixed-use and campus design approaches to new business and industrial developments.

ECD 1.3 Future Land Use Requirements. Require the expansion of future economic development to be located in areas of the county which are designated as urban expansion, village expansion, or villages.

ECD 1.4 Economic Development Strategic Plan: Work with the Economic Development Department and the Economic Development Commission to actively update and implement the applicable portions of the Economic Development Strategic Plan, including areas concerned with land use, workforce development, and business retention and growth. (4)

Cross References and Notes:

3.. Additional references to mixed use development are included in: PNG 4.0 Villages and Rural Communities (pg. 68); PLU 1.6 Village Expansion Areas (pg. 41); PLU 1.7 Villages (pg.43); PLU 1.8 Urban Expansion Areas (pg. 45); HHS 2.0 Quality of Life (pg. 175); HSG 1.0 Livable Neighborhoods (pg. 189); and PRC 2.3 Trails (pg.207)

4. The work group cited specific sections of the Economic Development Strategic Plan for four subjects:

- a) Workforce (Join forces with a regional-wide workforce development task force; survey target industries to assess labor market demand; Develop an action plan to increase the available IT skilled workforce; Advocate for a Comprehensive Vocational Training Facility to serve the County; Connect vocational training with the needs of existing targeted industries).
- b) Development (Expand the main industrial parks available industrial property; Develop new shell building in Christiansburg; Develop minimum investment criteria for locating in Montgomery County’s available industrial parks; Identify sites with the greatest marketing potential/appeal and focus resources; Establish viable real estate development partnerships to encourage speculative building on sites; Educate communities about Economic Development Department’s marketing and client management strategies).
- c) Program (Mobilize community resources to support local business development; Cooperate with Blacksburg and Christiansburg to interview and profile local businesses; Develop local industry database, with linkages, as a marketing tool; Encourage local participation in regional initiatives; Publish inventory of local resources; Promote business retention and expansion programs).
- d) Marketing and Recruitment (Create a technology zone; Enroll local business leaders in target marketing efforts; Restructure incentives in ways that favor the development of industries in target sectors and the creation of primary and/or family wage jobs).

ECD 2.0 Workforce Development: Develop a local workforce with the skills, training and experience necessary to succeed and advance in the job market of the future. (5)

ECD 2.1 Public Education and Workforce Development: Actively promote technical and professional training and workforce development for current and future workers in Montgomery County, which is necessary for future success.

ECD 2.1.1 Community Technical Education/ Knowledge Capital Task Force: Recognizing that knowledge-based capital is one of the region's strengths, appoint a task force to 1) evaluate knowledge-based capital in the Montgomery County MSA, as well as current student and adult educational and vocational training opportunities and facilities; 2) develop a long range plan for workforce development that addresses long-range needs and objectives; and 3) design and promote training and retraining programs which will benefit students, workers, and area businesses and institutions. (6)

ECD 2.1.2 Vocational / Technical Skills: Work with high school vocation / technical directors, guidance counselors, and others in the Montgomery County Public Schools to provide new programs and strengthen existing programs intended to develop marketable skill sets for non-college bound students.

ECD 2.1.3 Worker Retraining: Working with the area businesses, the Montgomery County Public Schools, New River Community College, and the two universities, provide programs

to retrain existing workers to meet the challenges and needs of a changing economy.

ECD 2.2 Future Workforce Development: Provide new workers with the skills and training necessary to succeed in the future.

ECD 2.2.1 Technical and IT Training: Increase the number of skilled IT workers in the New River Valley. Provide more required and elective IT courses in the public schools.

ECD 2.2.2 New Workers: Attract to Montgomery County and the New River Valley new workers with target industry skills.

ECD 2.2.3 Retention of College Graduates: Retain IT skilled individuals graduating from local universities and colleges in the local work force.

Cross References and Notes

5. Workforce development is also addressed in EDU 2.1 Job and Vocational Education (pg. 117) and HHS 2.0 Quality of Life (pg. 175). Issues surrounding diversity, living wage, accessibility, and expanded opportunities are addressed in HHS 2.2: Economic Development (pg. 175).

6. The task force should be made up of members from the Montgomery County Public Schools, the New River Community College, Virginia Tech, Radford University, local businesses, the Montgomery County Economic Development Department, the Montgomery County Economic Development Commission, and the Board of Supervisors, and representatives from Blacksburg and Christiansburg. The Community Technical Education/ Knowledge Capital Task Force is cross listed as EDU 2.1.1 (pg. 117)

ECD 3.0 Location and Land Use: Identify appropriate locations for new businesses to start and existing businesses to expand. (7)

ECD 3.1 Industrial & Business Parks: Identify locations for new industrial and business parks and/or the expansion of existing parks.

ECD 3.1.1 Product Inventory: Set county objectives for locations and square footage to be developed in order to have "product" in inventory.

ECD 3.1.2 Partnership Agreements: Work cooperatively with other localities in the development of regional business and industrial parks.

ECD 3.2 Zoning. Review and revise the Zoning Ordinance to allow for innovative approaches to the design and organization of industrial, light industrial, and business parks and business districts.

ECD 3.2.1 Campus Settings: Promote mixed use approaches (campus settings) mixing commercial, industrial, academic, and residential land uses, to the development of future business parks.

ECD 3.2.2 Two-Plus Story Structures: Consider increasing the intensity of selected business parks by going 2+ stories in height rather than single story buildings.

ECD 3.2.3 Smaller Sites: Promote the development of smaller (2 to 5 acre) industrial sites within business and industrial parks.

ECD 3.2.4 Flex-Industrial Zoning: Review and revise the County Zoning Ordinance to allow flex-industrial uses, by special use permit, in the GB General Business and M-1 Manufacturing zoning districts within the Villages, Village Expansion and Urban Expansion Areas. (8)

ECD 3.1.6 Research & Development Zoning: Review and revise the County Zoning Ordinance to allow research & development uses in the M-1 Manufacturing zoning district.

ECD 3.3 Downtown Revitalization: Encourage the adaptation and reuse of existing buildings in downtown locations. (9)

ECD 3.2.1 Technology Zone: Consider development of a technology zone for downtown Christiansburg. (10)

ECD 3.2.3 Fiber Optics: Extend fiber optic capabilities in downtown areas. (11)

ECD 3.2.3 Downtown Courthouse: Maintain County Courthouse in downtown Christiansburg.

Cross References and Notes

7. Issues surrounding business location and land use are also addressed in the Land Use Policies, included in the Government and Land Use Chapter. For more specific information, see PLU 1.6 Village Expansion Areas (pg. 41); PLU 1.7 Villages (pg. 43); and PLU 1.8 Urban Expansion Areas (pg. 45). Additional references to the siting of business and industrial areas is included in the Environmental Resources chapter, including ENV 3.0 Streams, Rivers, and Surface Waters (pg. 141); ENV 5.0 Groundwater (pg. 144); and ENV 6.0 Karst (pg.147). Transportation related issues are addressed in TRN 1.4 Connectivity and Access Management (pg. 220).

Cross References and Notes

8. The Zoning Ordinance defines flex industrial as Light industrial activities that occur in buildings of no more than two stories in height, with one or more loading docks, and not more than half of the gross floor area used for offices.
9. Downtown revitalization, as it relates to historic preservation, is included in CRS 1.0 Historic Preservation (pg.81).
10. Technology infrastructure, including telecommunications towers, is also addressed in UTL 2.0 Electric, Telecommunications, and Gas Utilities (pg. 236).
11. Fiber-optic networks are also addressed in UTL 2.3: Broadband/Fiber-optic Networks (pg. 236).

ECD 4.0 Attraction & Retention of Business and Industry: Attract new and retain existing businesses and industries that can best create viable job opportunities for all, expand the local tax base and maintain those qualities that make the County a highly desirable place to live and work.

ECD 4.1 Internal Focus: Encourage the growth of new and existing businesses and industries presently located in the county.

ECD 4.1.1 Entrepreneurial Economy: Encourage entrepreneurship and small business startups by county residents, including industrial, commercial, tourism-based, recreational and agricultural enterprises.(12)

ECD 4.1.2 Expansion Incentives: Develop financial incentives for existing businesses that meet growth objectives. Financial incentives for growth of existing businesses should be equivalent to financial incentives used to attract new businesses.

ECD 4.1.3 Visitation Program: Continue visitation program with existing businesses.

Cross References and Notes

12. Small business development issues are also addressed in the Environmental Resources and Cultural Resources chapters of this plan. For additional references on Agriculture-related economic development, see ENV 2.1.7 Rural Development Initiatives (pg. 139). Cultural and historic tourism and historic tourism corridors are addressed in CRS 1.3 Historic Preservation and Tourism (pg. 82). Recreational tourism and enterprises are addressed in PRC 2.4 Commercial Recreational Facilities (pg. 207).

ECD 4.2 External Focus: Attract new businesses and industries to the county primarily from the four sectors (transportation, plastics & polymers, biotechnology and information technology) targeted in the Economic Development Strategic Plan.

ECD 4.2.1 Air Transportation: Support development of good air transportation service in order to complete in a global economy. (13)

ECD 4.2.2 Rail Transportation: Support passenger rail service to Christiansburg and improved freight rail service along the Interstate 81 corridor. (14)

ECD 4.2.3 Retail Quality: Recognize that the presence of upscale retailers is an important consideration for many locational decisions. Therefore support development of a quality regional mall.

ECD 4.2.4 College Graduates Data: Include college students that have graduated or are going to graduate in labor market figures.

ECD 4.3 Local Tax Structure: Evaluate the implications of state changes to the local tax structure and the impact on current and future economic development. (15)

Cross References and Notes

13. Air transportation is addressed in TRN 5.1 Air Transportation (pg. 225).
14. Rail transportation is addressed in TRN 5.2 Rail Transportation (pg. 225).
15. Issues surrounding the local tax structure are addressed in PNG 6.0 Tax Structure and Legislative Changes and Priorities (pg. 69). Issues related to public funding sources, including cash proffers, are addressed in PNG 7.0 Growth Impact (pg. 69); PLU 2.2 Proffer Guidelines (pg. 48); PRC 2.0 Recreational Facilities and Programs (pg. 207); and SFY 1.3 Future Capital Facilities (pg. 197).